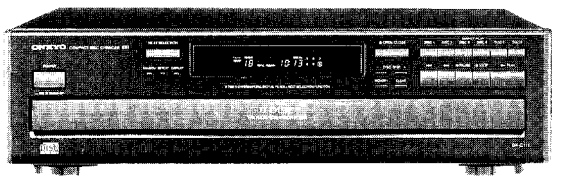
# ONKYO SERVICE MANUAL

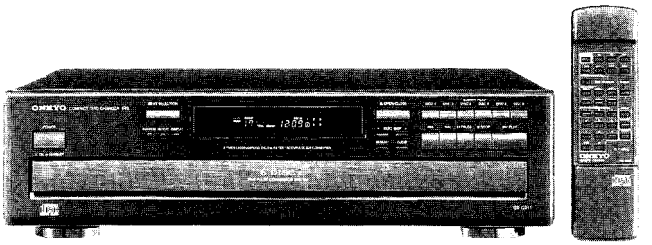
REF. NO. 3480

## COMPACT DISC PLAYER

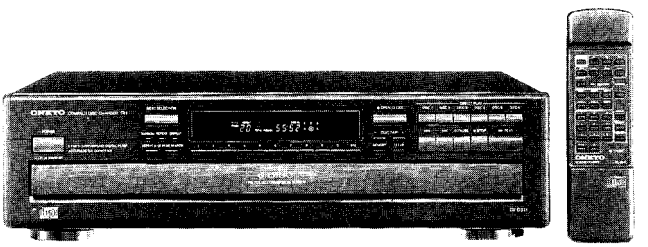
### MODEL DX-C111



### MODEL DX-C211



### MODEL DX-C311



| | |
|---|---|
| BMD, BMDN | 120V AC, 60Hz |
| BMP, BMPV | 230V AC, 50Hz |
| BMW | 120/220V AC, 50/60Hz |

**SAFETY-RELATED COMPONENT WARNING!!**

**COMPONENTS IDENTIFIED BY MARK ⚠ ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PARTS NUMBERS APPEAR AS SHOWN IN THIS MANUAL.**

**MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.**

## SPECIFICATIONS

Compact Disc Automatic Changer Model DX-C311/C211/C111

| | |
|---|---|
| Signal readout system: | Optical non-contact |
| Reading rotation: | About 500 - 200 r.p.m. (constant linear velocity) |
| Linear velocity: | 1.2 - 1.4 m/s |
| Error correction system: | Cross interleave Reed-Solomon code |
| D/A converter: | 1 bit PWM/ ACCUPULSE (DX-C311/C211) |
| Sampling frequency: | 352.8 kHz (8 times oversampling) |
| Number of channels: | 2 (stereo) |
| Frequency response: | 2Hz - 20kHz |
| Total harmonic distortion: | 0.004% (at 1kHz) |
| Dynamic range: | 96dB (at 1kHz) |
| Signal to noise ratio: | 96dB (at 1kHz) |
| Channel separation: | 90dB (at 1kHz) |
| Wow and Flutter: | Below threshold of measurability |
| Output level: | 2 volts r.m.s. |
| Power consumption: | 13 watts |
| Dimensions (W × H × D): | 455 × 120 × 425 mm (17-15/16" × 4-3/4" × 16-11/16") |
| Mass: | 7.4 kg (16.3 lbs) |

Specifications and external appearance are subject to change without notice because of product improvements.

**ONKYO. AUDIO COMPONENTS**

# SERVICE PROCEDURES

## 1. Safety-check out

After correcting the original service problem,perform the following safety check before releasing the set to the customer:

Connect the insulating-resistance tester between the plug of power supply cord and chassis.

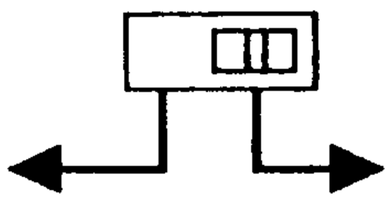
Specifications:More than 10Mohm at 500V.

## 2. Voltage Selector (Back panel)

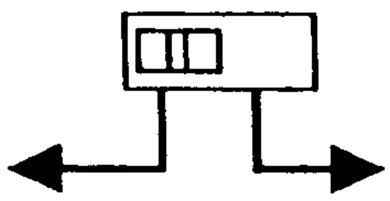
Worldwide models are equipped with a voltage selector to conform with local power supplies.Be sure to set this switch to match the voltage of the power supply in user's area before turning the power switch on.

Voltage is changed by sliding the groove in the switch with a screw driver to the right or left.

Confirm that the switch has been moved all the way to the right or left before turning the power switch on.




at AC120V




at AC220V

# CAUTION ON REPLACEMENT OF OPTICAL PICK UP

The laser diode in the optical pickup block is so sensitive to static electricity,surge current and etc, that the components are liable to be broken down or its reliability remarkably deteriorated.

During repair,carefulley take the following precautions. (The following precautions are included in the service parts.)

PRECAUTIONS

1.Ground for the work-desk.
Place a conductive sheet such as a sheet of copper (with inpedance lower than 10MΩ) on the work-desk and place the set on the conductive sheet so that the chassis.

2.Grounding for the test equipment and tools.
Test equipments and toolings should be grounded in order that their ground level is the same the ground of the power source.

3.Grounding for the human body.
Be sure to put on a wrist-strap for grounding whose other end is grounded.
Be particularly careful when the workers wear synthetic fiber clothes, or air is dry.

4.Select a soldering iron that permits no leakage and have the tip of the iron well-grounded.

5.Do not check the laser diode terminals with the probe of a circuit tester or oscilloscope.

# PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs a laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMMISION, BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.

**Laser Diode Properties**

- Material: GaAS/GaAlAs
- Wavelength: 780nm
- Emission Duration: continuous
- Laser output: max. 0.5mW*

*This output is the value measured at a distance about 1.8mm from the objective lens surface on the Optical Pick-up Block.

# LASER WARNING LABEL

These labels are located on the mechanism.

1. **Warning lable**
   This label is located on the arm of mechanism.

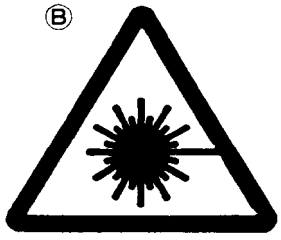
Ⓐ

**DANGER** —INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK FAILED OR DEFEATED. AVOID DIRECT EXPOSURE TO BEAM

**CAUTION** —HAZARDOUS LASER AND ELECTROMAGNETIC RADIATION WHEN OPEN AND INTERLOCK DEFEATED

**ATTENTION** —RAYONNEMENT LASER ET ELECTROMAGNETIQUE DANGEREUX SI OUVERT AVEC L'ECLENCHEMENT DE SECURITE ANNULE.

Ⓑ



Ⓒ

ADVARSEL: USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDER ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.

Ⓓ

VARO!
AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

Ⓔ

VARNING
OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.

Ⓐ : Danger label
Ⓑ : Except 120V model
Ⓒ : Except 120V model
Ⓓ,Ⓔ,Ⓕ: Only 230V model

Ⓕ

ADVARSEL
USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.

2. **Certification label (120V model)**
   This label is located on the back panel.

PRODUCT IS CERTIFIED BY THE MANUFACTURER TO COMPLY WITH DHHS RULES 21 CFR SUBCHAPTER J APPLICABLE AT THE DATE OF MANUFACTURE.

MANUFACTURED

3. **Class 1 label (Except 120V model)**
   This label is located on the back panel.

"CLASS 1 LASER PRODUCT"

LUOKAN 1 LASERLAITE

KLASS 1 LASER APPARAT

ADVARSEL

Denna maekning er anbragt på apparatets højre side og indikerer, at apparatet arbejder med laserstråler af klasse 1, hvilket betyder, at der anvendes laserstråler af svageste klasse, og at man ikke på apparatets yderside kan blive udsat for utilladelig kraftig stråling.

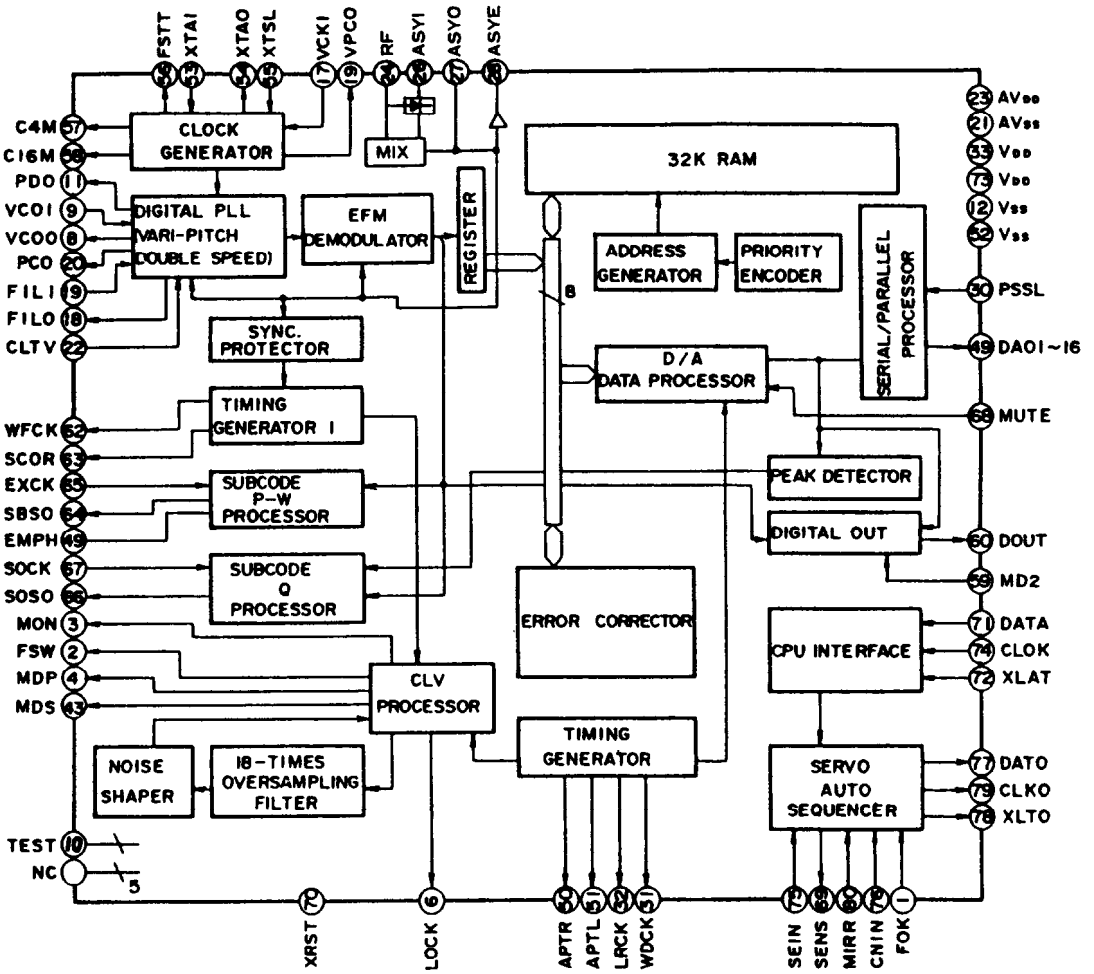
APPARATET BØ/R KUN ÅBNES AF FAGFOLK MED SÉ RLIGT KENDSKAB TIL APPARATER MED LASERSTRÅLER!

Indvendigt i apparatet er anbragt den her gengivne advarselsmærkning, som advarer imod at foretage sådnne indgreb i apparatet, at man kan komme til at udsaette sig for laserstråling.

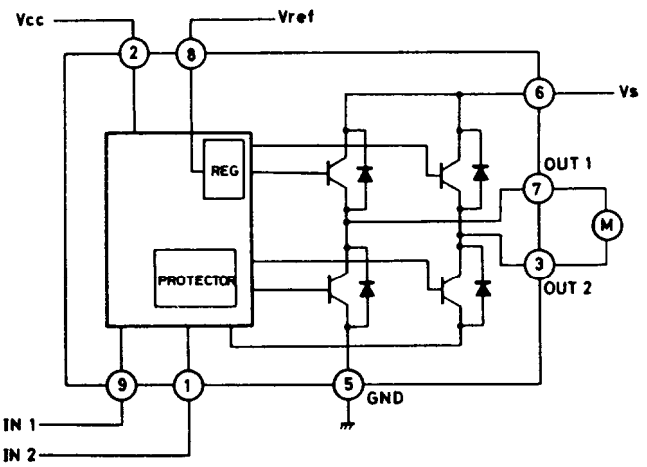
VAROITUS! LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAINTULLA TAVALLA SAATTAA ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITTÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

# IC BLOCK DIAGRAMS AND DESCRIPTIONS

## CXD2500AQ (Digital Signal Processor)




## TA-7291S (Motor Drive)



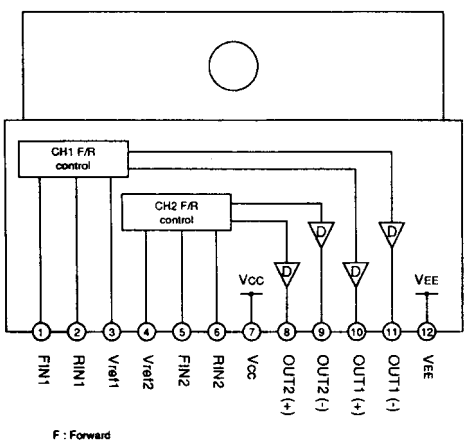
| NO. | SYMBOL | I/O | DESCRIPTION |
|---|---|---|---|
| 1 | FOK | I | Foucs Ok input |
| 2 | FSW | O | Output filter changeover output for spindle motor |
| 3 | MON | O | Spindle motor control output |
| 4 | MDP | O | Spindle motor servo control |
| 5 | MDS | O | Spindle motor servo control |
| 6 | LOCK | O | H when GFS is the high level |
| 7 | NC | | |
| 8 | VCOO | O | Oscillation circuit output for analog EFM PLL. |
| 9 | VCOI | I | Oscillation circuit input for analog EFM PLL. (8.6436MHz) |
| 10 | TEST | I | Test terminal |
| 11 | PDO | O | Charge pump output analog EFM PLL |
| 12 | Vss | | Ground terminal |
| 13-15 | NC | | |
| 16 | VPCO | O | PLL charge pump output for variable pitch |
| 17 | VCKI | I | Clock input for variable pitch from VCO (16.934MHz) |
| 18 | FILO | O | Filter output for master PLL. |
| 19 | FILI | I | Filter input for master PLL. |
| 20 | PCO | O | Charge pump output of master PLL |
| 21 | AVss | | Analog ground |
| 22 | CLTV | I | VCO control voltage input for master |
| 23 | AVDD | | Analog section power supply (+5V) |
| 24 | RF | I | EFM signal input |
| 25 | BIAS | I | Asymmetry circuit constant current input |
| 26 | ASYI | I | Asymmetry comparator voltage input |
| 27 | ASYO | O | EFM full swing output |
| 28 | ASYE | I | Asymmetry control circuit |
| 29 | NC | | |
| 30 | PSSL | O | Audio data output mode changeover input<br>Serial data at L and paraller data at H. |
| 31 | WDCK | I | D/A interface for 48 bits slot. Word clock f=2Fs. |
| 32 | LRCK | I | D/A interface for 48 bits slot. LR clock f=Fs. |
| 33 | VDD | | Power supply terminal (+5V) |
| 34-49 | | | Data output terminals |

| | | | PSSL=1 | PSSL=0 |
|---|---|---|---|---|
| 34 | DA16 | O | DA16 | Serial data of 48 bits slot |
| 35 | DA15 | O | DA15 | Bit clock of 48 bits slot |
| 36 | DA14 | O | DA14 | Serial data of 64 bits slot |
| 37 | DA13 | O | DA13 | Bit clock of 68 bits slot |
| 38 | DA12 | O | DA12 | LR clock of 68 bits slot |
| 39 | DA11 | O | DA11 | GTOP output |
| 40 | DA10 | O | DA10 | XUGF output |
| 41 | DA09 | O | DA09 | XPLCK output |

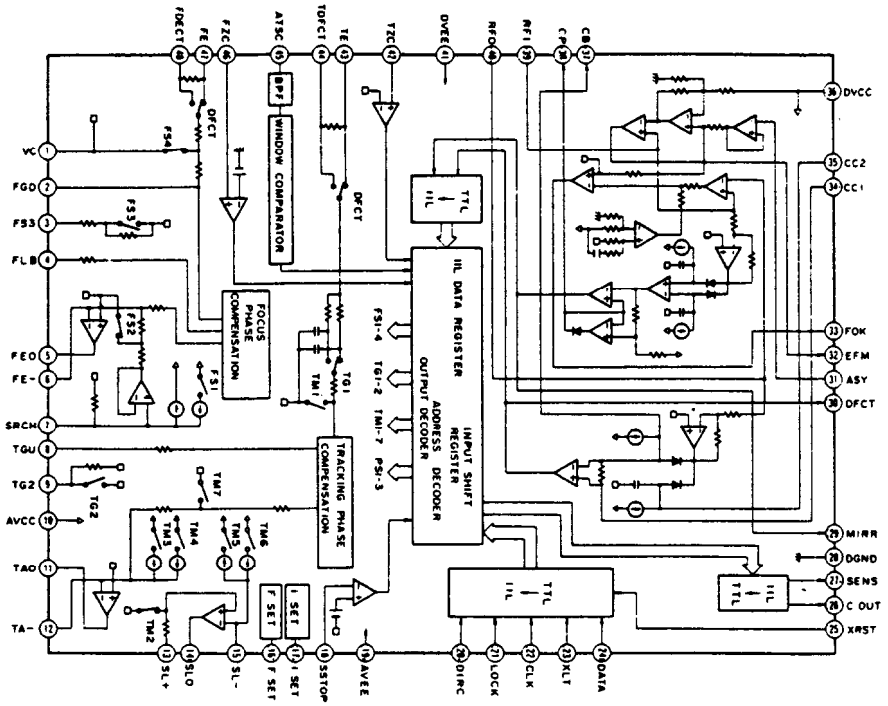
| NO. | SYMBOL | I/O | DESCRIPTION | |
|---|---|---|---|---|
| 42 | DA08 | O | DA08 | GFS output |
| 43 | DA07 | O | DA07 | RFCK output |
| 44 | DA06 | O | DA06 | C2P0 output |
| 45 | DA05 | O | DA05 | XRAOF output |
| 46 | DA04 | O | DA04 | MNT 3 output |
| 47 | DA03 | O | DA03 | MNT 2 output |
| 48 | DA02 | O | DA02 | MNT 1 output |
| 49 | DA01 | O | DA01 | MNT 0 output |
| 50 | APTR | O | Control output for aperture correction. H when R ch. | |
| 51 | APTL | O | Control output for aperture correction. H when L ch. | |
| 52 | Vss | | Ground terminal | |
| 53 | XTAI | I | Crystal oscillation circuit input of 16.9344MHz or 33.8688MHz input. | |
| 54 | XTAO | O | Crystal oscillation circuit output of 16.9344MHz. | |
| 55 | XTSL | I | Crystal selection input terminal. L when 16.9344MHz. H when 33.8688MHz. | |
| 56 | FSTT | O | 2/3 divided output of pins 53 and 54. | |
| 57 | C4M | O | 4.2336 MHz output | |
| 58 | C16M | O | 16.9344 MHz output | |
| 59 | MD2 | I | Digital output control input. On at high level. | |
| 60 | DOUT | O | Digital output | |
| 61 | EMPH | O | Emphasis control output. Active high. | |
| 62 | WFCK | O | Write frame clock output | |
| 63 | SCOR | O | Sub-code detection output. H when is detected SO or SI. | |
| 64 | SBSO | O | Serial output of sub-code (P~W) | |
| 65 | EXCK | I | Clock input for read out SQSO. | |
| 66 | SQSO | O | Sub Q 80 bits, PCM peak, and level data 16 bits output. | |
| 67 | SQCK | I | Clock input for read out SQSO | |
| 68 | MUTE | O | Muting control output. Active H. | |
| 69 | SENS | | Sens output. Output to the microprocessor | |
| 70 | XRST | I | System reset. Reset at the low level. | |
| 71 | DATA | I | Serial data input from the microprocessor. | |
| 72 | XLTA | I | Latch input from the microprocessor. Latch the serial data at the trailing. | |
| 73 | VDD | | Power supply treminal | |
| 74 | CLOK | I | Serial data transfer clock input from microprocessor | |
| 75 | SEIN | I | Sens input from SSP | |
| 76 | CNCI | I | Track jump numbers count signal input | |
| 77 | DATO | O | Serial data output to SSP | |
| 78 | XLTO | O | Serial data latch output to SSP. Latch at trailing. | |
| 79 | CLKO | O | Serial data transfer clock output to SSP. | |
| 80 | MIRR | I | Mirror signal input | |

Note: SSP: IC101 CXA1372Q

## BA6191 (Motor Drive)



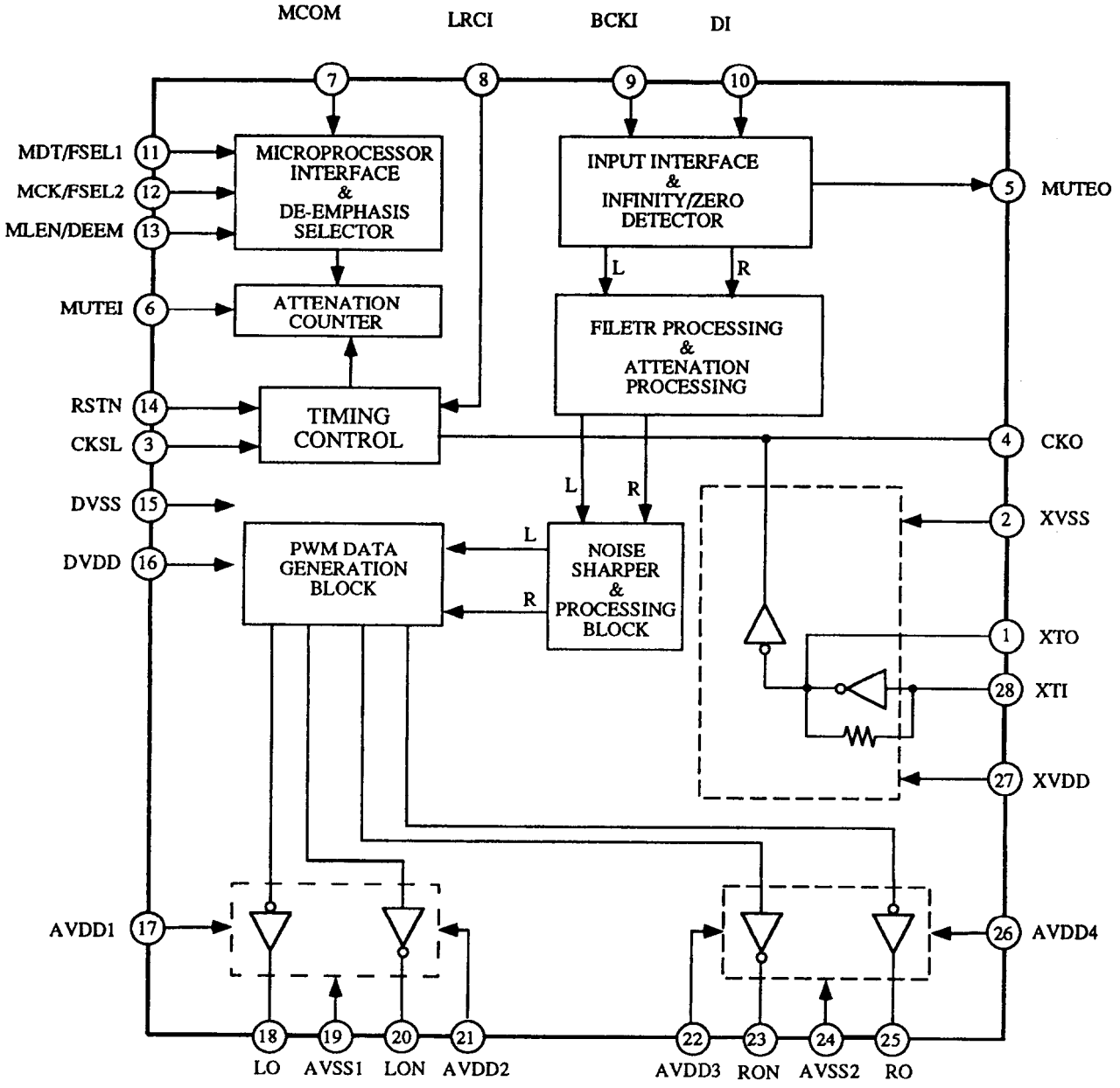
# CXA1372Q (Servo Signal Processor)




| PIN NO. | SYMBOL | I/O | DESCIRPION |
|---|---|---|---|
| 1 | VC | I | Mid-point voltage input terminal. |
| 2 | FGD | I | Connect the capacitor between FS3 and this pin when the high frequency gain focus servo is dropped. |
| 3 | FS3 | I | Focus servo high frequency gain changeover input terminal. |
| 4 | FLB | I | Input terminal for the low frequency boost of focus servo. |
| 5 | FEO | O | Focus drive output terminal. |
| 6 | FE- | I | Inversion input terminal of focus amplifier. |
| 7 | SRCH | I | Time constant terminal to make the focus search waveform. |
| 8 | TGU | I | Tracking high frequency changeover input terminal. |
| 11 | TAO | O | Tracking drive output terminal. |
| 12 | TA- | I | Inversion input terminal of tracking amplifier. |
| 13 | SL+ | I | No-inversion input terminal of sled amplifier. |
| 14 | SLO | O | Sled drive output terminal. |
| 15 | SL- | I | Inversion input terminal of sled amplifier. |
| 16 | FSET | I | Peak setting input of phase correction of focus tracking. |
| 17 | ISET | I | This terminal is flowed the current so that the focus search,tarcking jump,and sled kick height is decided. |
| 18 | SSTOP | I | Inner switch selection input terminal. |
| 20 | DIRC | I | This terminal is used when track jump. |
| 21 | LOCK | I | The sled runaway prevention circuit operates at the low level. |
| 22 | CLK | I | Serial data transfer clock input from microprocessor. |

| PIN NO. | SYMBOL | I/O | DESCIRPION |
|---|---|---|---|
| 23 | XLT | I | Latch input terminal for microprocessor. |
| 24 | DATA | I | Serial data input terminal for microprocessor. |
| 25 | XRST | I | Reset input terminal.Active low. |
| 26 | C.OUT | O | Signal output to count the track numbers. |
| 27 | SENS | O | This terminal outputs FZC,and SSTOP to according command from the microprocessor. |
| 29 | MIRR | O | Mirror comparator output terminal. |
| 30 | DFCT | O | Defect comparator output terminal. |
| 31 | ASY | I | Auto asymmetry control input terminal. |
| 32 | EFM | O | EFM comparator output terminal. |
| 33 | FOK | O | Focus OK comparator output terminal. |
| 34 | CC1 | O | Defect bottom hold output terminal. |
| 35 | CC2 | I | Defect bottom hold input terminal from CC1. |
| 37 | CB | I | Defect bottom hold capacitor connection terminal. |
| 38 | CP | I | Mirror hold capacitor connection terminal. |
| 39 | RFI | I | RF summing amplifier input terminal. |
| 40 | RFO | O | RF summing amplifier output terminal. |
| 42 | TZC | I | Tracking zero-cross comparator input terminal. |
| 43 | TE | I | Tracking error input terminal. |
| 44 | TDFCT | I | Capacitor connection terminal for time constant when defect. |
| 45 | ATSC | I | Window comparator input terminal for ATSC detection. |
| 46 | FZC | I | Focos zero-cross comparator input terminal. |
| 47 | FE | I | Focus error input terminal. |
| 48 | FDFCT | I | Capacitor connection terminal for time constant when defect. |

## SM5872CN (D/A Converter)




| Pin No. | Terminal | I/O | Function | Pin No. | Terminal | I/O | Function |
|---|---|---|---|---|---|---|---|
| 1 | XTO | O | Resonator section | 28 | XTI | I | Resonator section |
| 2 | XVSS | | Ground for resonator system | 27 | XVDD | | 5V for resonator system |
| 3 | CKSL | I | | 26 | AVDD4 | | 5V for analog section |
| 4 | CKO | O | Output clock of resonator section: 384fs | 25 | RO | O | R ch PWM output (+) |
| 5 | MUTEO | O | Infinity zero detector output | 24 | AVSS2 | | Ground for analog section |
| 6 | MUTEI | I | Muting output | 23 | RON | O | R ch PWM output (-) |
| 7 | MCOM | I | Interface switching control | 22 | AVDD3 | | 5V for analog section |
| 8 | LRCI | I | Sampling rate clock of input data: H=L ch, L=R ch | 21 | AVDD2 | | 5V for analog section |
| 9 | BCKI | I | Bit clock of input data | 20 | LON | O | L ch PWM output (+) |
| 10 | DI | I | Input data | 19 | AVSS1 | | Ground for analog section |
| 11 | FSEL1 | I | Sampling frequency=44.1 kHz | 18 | LO | O | L ch PWM output (-) |
| 12 | FSEL2 | I | When FSEL1,FSEL2, and MCOML are the low level. | 17 | AVDD1 | | 5V for analog section |
| 13 | DEEM | I | De-emphasis control input | 16 | DVDD | | 5V for digital section |
| 14 | RSTN | | System reset: L=Reset | 15 | DVSS | | Ground for digital section |

# μPD78043GF-082 (Microprocessor)

| No. | Symbol | I/O | | Description |
|---|---|---|---|---|
| 1 | NC | | | Not used |
| 2 | NC | | | |
| 3 | 5G | | | |
| 4 | 4G | | | |
| 5 | 3G | O | H | Digit output terminals for fluorescent indicator tube |
| 6 | 2G | | | |
| 7 | 1G | | | |
| 8 | Vdd | I | | Power supply terminal (+5V) |
| 9 | CLK | O | | Serial transfer clock output terminal of command to the signal processor IC. |
| 10 | DATA | O | H | Serial data of command of signal processing IC |
| 11 | XLT | O | ↓ | Command to signal processing IC |
| 12 | DMUT | O | H | Muting signal to signal processing IC |
| 13 | AMUT | O | H | Muting signal |
| 14 | SQCK | O | ↑ | Serial transfer clock of sub code Q to signal processing IC |
| 15 | NC | | | Not used |
| 16 | SQSO | I | | Serial transfer data of sub code Q from signal processing IC |
| 17 | XRST | I | L | Reset signal |
| 18 | SENS | I | I | Sense signal from signal processing IC |
| 19 | RI.IN | I | | Input terminal of control signal RI |
| 20 | GND | I | | |
| 21 | RI.OUT | O | | Output terminal of control signal RI |
| 22 | MD2 | O | L | Inhibiting signal of digital output |
| 23 | DEFECT | O | H | Inhibiting signal of DEFECT circuit to servo comparator |
| 24 | AD4 | | 6 | |
| 25 | AD3 | | 7 | |
| 26 | AD2 | I | 8 | A/D port for key input (Normal : 5V) |
| 27 | AD1 | | 9 | |
| 28 | AD0 | | 10 | |
| 29 | AVdd | I | | Voltage supply terminal for analog |
| 30 | AVref | I | | Reference voltage supply terminal for analog |
| 31 | DX-C311 Select | I | | Model selection terminal |
| 32 | NC | | | Not used |
| 33 | Vss | I | | |
| 34 | X1 | I | | System clock oscillation input |
| 35 | X2 | O | | System clock oscillation output |
| 36 | LSR | O | H | Laser control signal |
| 37 | ROT.STOP.SENS | I | H | Carousel stop position detection photo interrupter input |
| 38 | ROT.POS.SENS | I | ↑ | Carousel disc position detector photo interrupter input |
| 39 | ROT.HI | O | H | Carousel high speed rotation signal |
| 40 | ROT.R | O | L | Carousel rotation control signal |
| 41 | ROT.L | O | L | |
| 42 | CH.CLOSE | O | L | Chucking control signal |
| 43 | CH.OPEN | O | L | |
| 44 | LD.CLOSE | O | L | Tray loading control signal |
| 45 | LD.OPEN | O | L | |
| 46 | SCOR | I | ↓ | Synchronizing signal detector of sub code sink |
| 47 | RMCN | I | L | Remote control signal input port |
| 48 | NC | | | Not used |
| 49 | FOK | I | H | Focus OK signal |
| 50 | LD.CLOSE.SW | I | L | Tray loading finishing switch input |
| 51 | LD.OPEN.SW | I | L | Tray opening finishing switch input |
| 52 | Vdd | I | L | |
| 53 | CH.CLOSE.SW | I | L | Chucking finishing switch input |
| 54 | CH.OPEN.SW | I | L | Chucking open finishing switch input |
| 55 | LD.CURRENT | I | L | Detective signal of overcurrent for loading motor |
| 56 | ROULETTE.BRAKE | I | | Setting the carousel break (H=40msec,L=20msec) |
| 57 | NC | | | |
| 58 | NC | | | Not used |
| 59 | NC | | | |
| 60 | NC | | | |
| 61 | P16 | | | |
| 62 | P15 | | | |
| 63 | P14 | | | |
| 64 | P13 | | | |
| 65 | P12 | O | H | Segment output for fluorescent indicator tube |
| 66 | P11 | | | |
| 67 | P10 | | | |
| 68 | P9 | | | |
| 69 | P8 | | | |
| 70 | Vfdp | I | | Negative voltage for FL tube |
| 71 | P7 | | | |
| 72 | P6 | | | |
| 73 | P5 | | | |
| 74 | P4 | O | H | Segment output for fluorescent indicator tube |
| 75 | P3 | | | |
| 76 | P2 | | | |
| 77 | P1 | | | |
| 78 | NC | | | |
| 79 | NC | | | Not used |
| 80 | NC | | | |

H : Operation at the high level

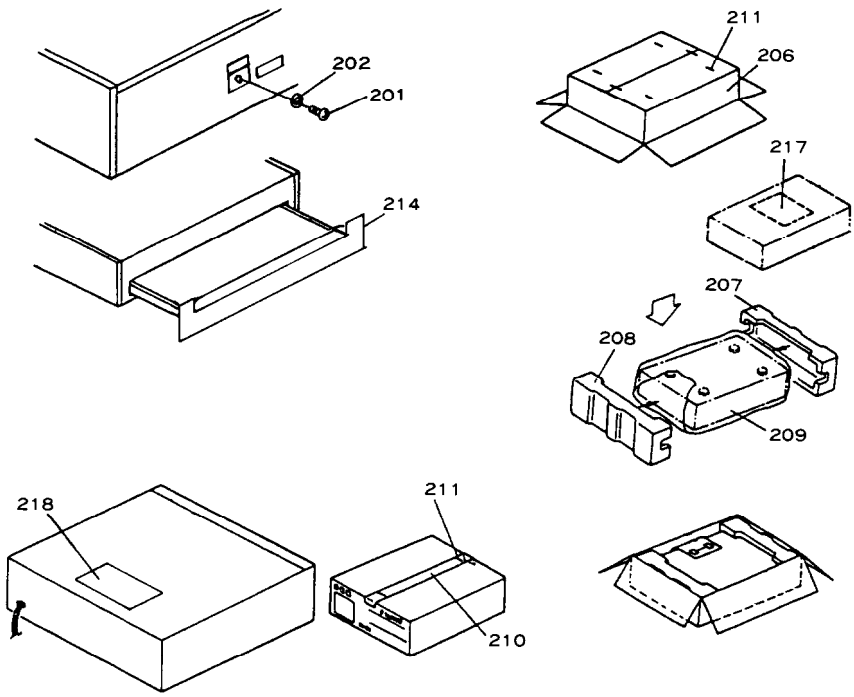
L : Operation at the low lebel

6,7,8,9,10 : A/D converter input

↑ : Operation at leading pulse

↓ : Operation at trailing pulse

# PACKING VIEW




# PARTS LIST

| REF.NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 201 | 82115018 | 5P+18FN, Screw |
| 202 | 27270357 | t 0.5 x 15 x 5.2, Spacer |
| 206 | 29052745Y | Master carton box <DX-C111> |
| | 29052726Y | Master carton box <DX-C211> |
| | 29052727Y | Master carton box <DX-C311> |
| 207 | 29091658Y | Pad, L |
| 208 | 29091659Y | Pad, R |
| 209 | 29100141Y | 700 x 600, Poly bag |
| 210 | 29110071 | Damplon tape |
| 211 | 282301 | Sealing hook |
| 214 | 29095721Y | Sheet, Door |
| 246 | 29360840Y | Label, sheet |
| 217 | 29355207Y | Instruction sheet |
| 218 | 29360687Y | Label, Class1 <P> |
| 219 | 29361764 | Label (P), <N> |

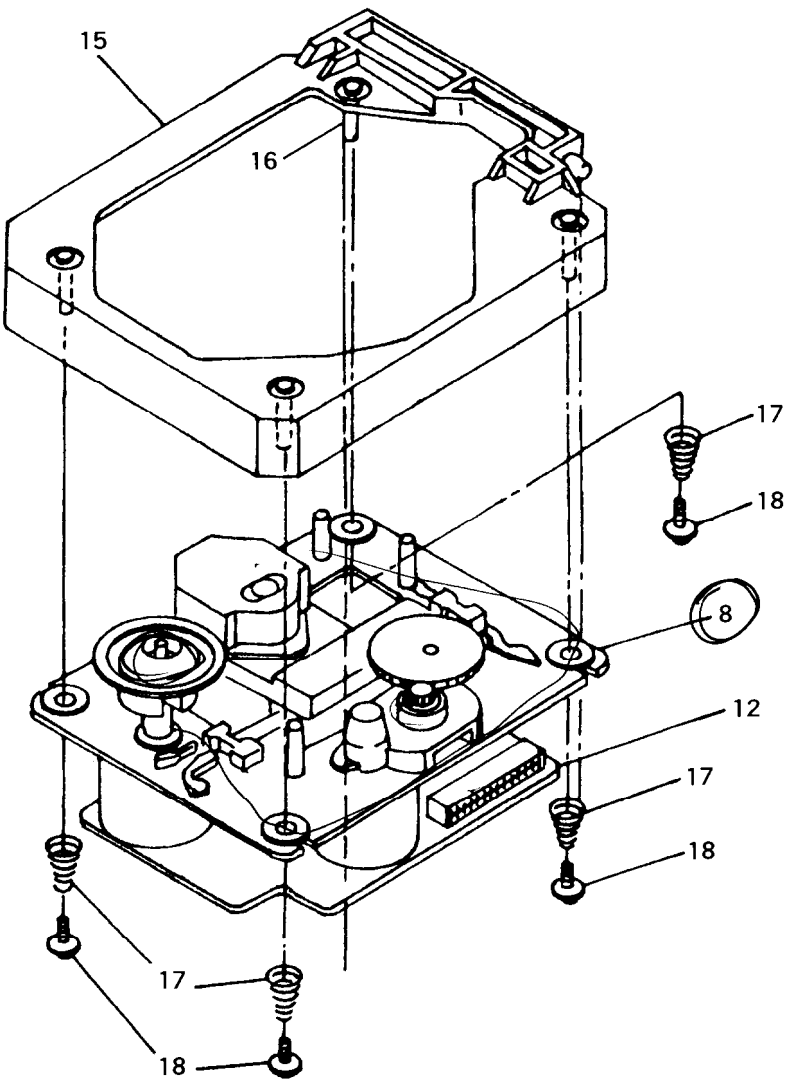
| PART NO. | DESCRIPTION |
|---|---|
| Accessary bag ass'y | |
| 2010098A | Connection cord |
| 2010200 | Remote control cord |
| 24140264Y | RC-264C, Remote control unit, EXCEPT DX-C111 |
| 3010054 | UM-3, Two batteries, EXCEPT DX-C111 |
| 29341942AY | Instruction manual, E |
| 29341943Y | Instruction manual, <V>, EXCEPT DX-C111 |
| 29341944AY | Instruction manual, 6 Land <P>, EXCEPT DX-C111 |
| 29341947AY | Instruction manual, 3 Land <W>, EXCEPT DX-C111 |
| 29365019AY | Warranty card <N> |
| 29365020J | Warranty card <V> |
| 29358002KY | Service station list <N> |
| 29361713Y | UPC label <N> |
| 25055040 | CV-K-2, Converstion plug <W>, EXCEPT DX-C111 |
| 29100097-1 | 350 x 250,Styrene bag |
| 29100094B | Styrene bag for warranty card <V> |

DX-C211(B)UWX-D AND DX-C211(B)UWX-G TYPES ARE SAME AS DX-C211(B)UW WITH THE EXCEPTION OF THE FOLLOWING SECTION.

| PAGE | REF.NO. | PART NAME | UWX-D/G PART. NO. | UW PART. NO. |
|---|---|---|---|---|
| 9 | 203 | Master carton box | 29052734Y | 29052726Y |
| 9 | | Warranty Card | 29365021 | NOT USED |
| 9 | | Service station list | 29358002J | NOT USED |
| 9 | | CV-, Conversion plug | 25055251 | 25055040 |
| 9 | | UPC label | 29361714 | NOT USED |

NOTE: <D>: 120V model only
<P>: 230V model only
<W>: Worldwide model only
<Q>: 240V model only
<N>: U.S.A. model only
<V>: Germany model only
<C>: Canadian model only

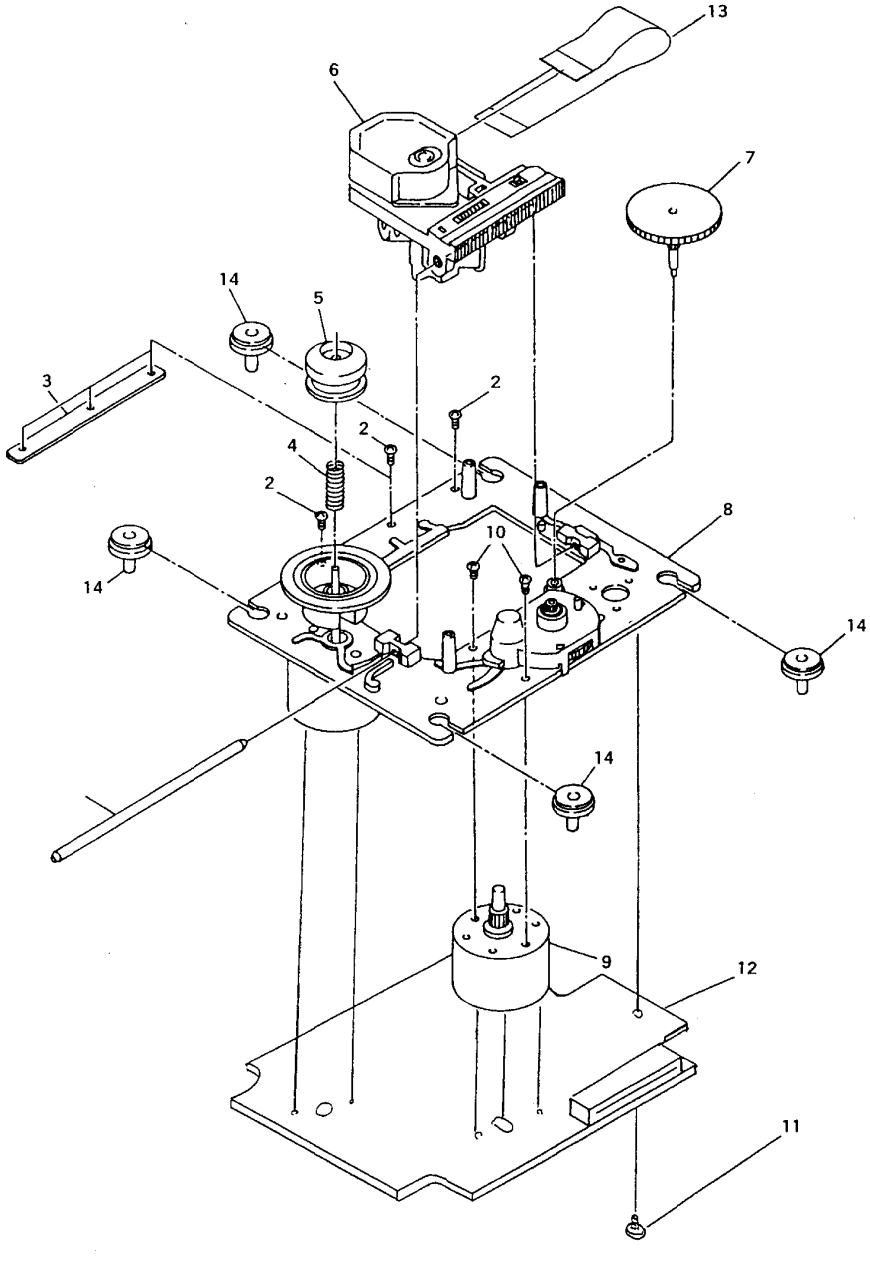
# MECHANISM-EXPLODED VIEW



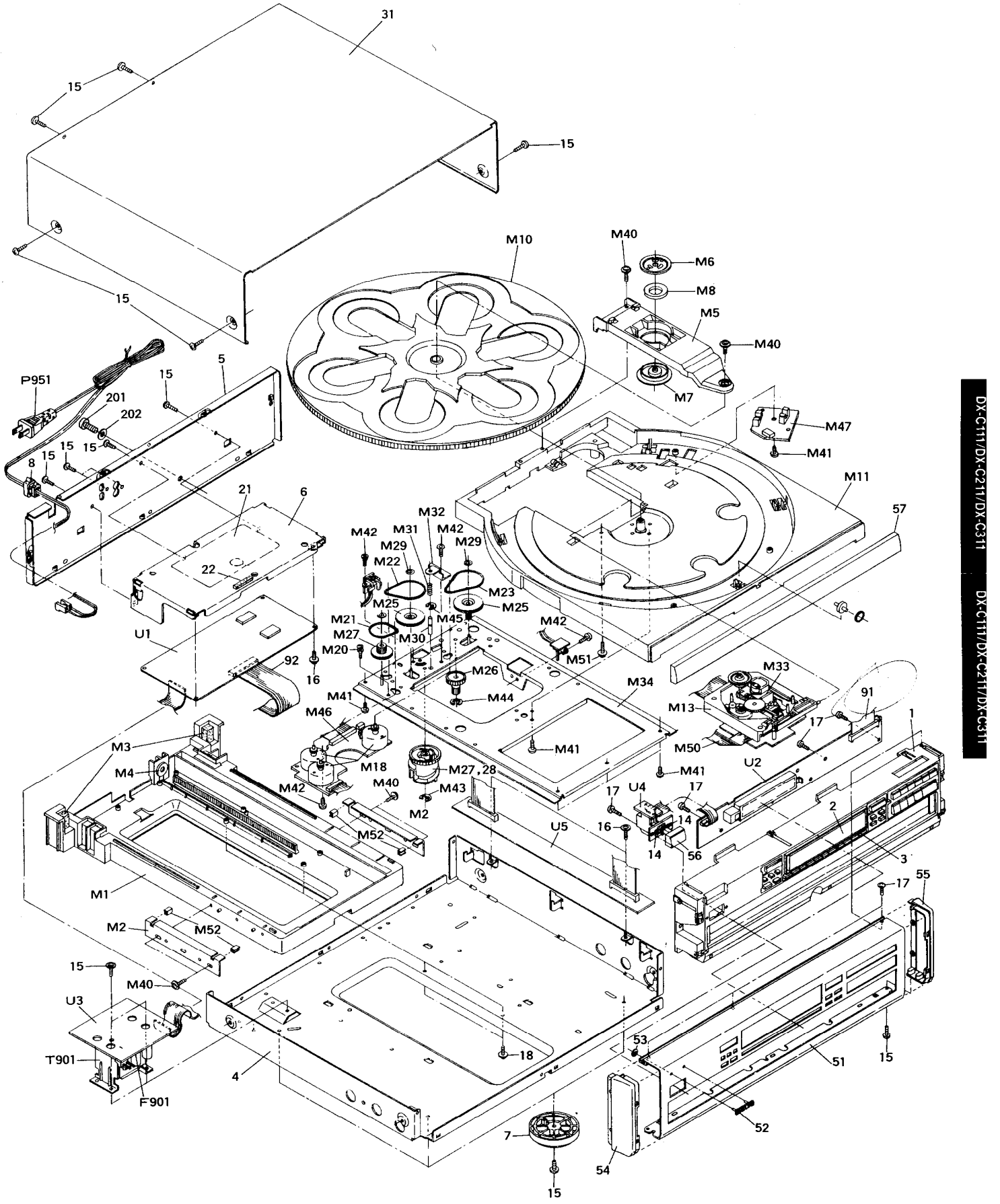
## PARTS LIST

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | 24828006 | Sled shaft |
| 2 | 24840068 | 2 x 5, Self-tapping screw |
| 3 | 24822015A | Reinforcement plate |
| 4 | 24820024 | Spring |
| 5 | 24824003 | Centering |
| 6 | 24110011 | Pick-up |
| 7 | 24810023 | Wheel |
| 8 | 24802014 | Chassis ass´y — spindle motor |
| 9 | 24804012 | Sled motor ass´y |
| 10 | 82112003 | 2P+3FN, Pan head screw |
| 11 | 24840099 | 2 x 6, Self-tapping screw |
| 12 | 24840075A | AR-AS-1A, RF/Servo pc board ass´y |
| 13 | 24840074 | Flexible cable |
| 14 | 24818012 | Insulator (FLT) |
| 15 | 24802016 | Chassis (SUB) |
| 16 | 24828012 | Shaft (FLT) |
| 17 | 24820026 | Spring (FLT) |
| 18 | 24609072Y | Screw (FLT) |

## PICK-UP DRIVE UNIT KSK-1320A



# EXPLODED VIEW




DX-C111/DX-C211/DX-C311

DX-C111/DX-C211/DX-C311

# PARTS LIST

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | 27110801Y | Front bracket |
| 2 | 28191679AY | Clear plate |
| 3 | 28324948Y | Knob, ten key |
| 4 | 27100282Y | Chassis |
| 5 | 27121854AY | Rear panel <D,N>, DX-C111 |
| | 27121855AY | Rear panel <D,N>, DX-C211 |
| | 27121858Y | Rear panel <D,N>, DX-C311 |
| | 27121854Y | Rear panel <P>, DX-C211 |
| | 27121859Y | Rear panel <P>, DX-C311 |
| | 27121856Y | Rear panel <W>, DX-C211 |
| 6 | 27130731Y | Bracket (PC) |
| 7 | 27175292Y | Leg ass'y |
| ⚠ 8 | 27300750 | Cord bushing |
| 14 | 82143006Y | 3P+6FN(BC), Screw |
| 15 | 834430088Y | 3TTS+8B(BC), Screw |
| 16 | 831130088Y | 3TTW+8B, Screw |
| 17 | 833430080Y | 3TTP+8P(BC), Screw |
| 18 | 831430100Y | 3TTW+10P(BC), SCREW |
| 21 | 29361581Y | LABEL(ALL) |
| 22 | 28141240Y | t 3 x 35 x 5, RGK-3102P-6, Cushion |
| 31 | 28184513AY | Top cover |
| 51 | 27211592Y | Front panel <D,N>, DX-C111 |
| | 27211593Y | Front panel <D,N>, DX-C211 |
| | 27211594Y | Front panel <D,N>, DX-C311 |
| 52 | 28135199Y | Badge |
| 53 | 8910301 | CS-ring |
| 54 | 28125248Y | End cap L |
| 55 | 28125249Y | End cap R |
| 56 | 28324140Y | Knob, power |
| 57 | 28148292Y | Door |

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 91 | 2046341512Y | NCFC6-341512, ETC TO DIS & AR, Flat cable |
| 92 | 2046312522Y | NCFC6-312522, MECH. TO AR, Flat cable |
| 201 | 82115018 | 5P+18FN, Screw |
| 202 | 27270357 | t 0.5 x 15 x 5.2, Spacer |
| P951 | 253192HITY | AS-UC-6#18, Power supply cord <D> |
| | 253193HITY | AS-CEE, 250V, 2.5A, Power supply cord <P>, DX-C211/C311 |
| ⚠ F901 | 252075Y | 2.5A-SE-EAK <P>, DX-C211/C311 |
| ⚠ T901 | 2300992Y | NPT-1200D, Power transformer |
| | 2300993Y | NPT-1200P, Power transformer <P>, DX-C211/C311 |
| | 2300994Y | NPT-1200DG, Power transformer <W>, DX-C211 |
| U1 | 1H241520-1Y | NAAR-4920-1, Main circuit pc board ass'y, DX-C111 |
| | 1H242520-2Y | NAAR-4920-2, Main circuit pc board ass'y, DX-C211 |
| | 1H243520-3Y | NAAR-4920-3, Main circuit pc board ass'y, DX-C311 |
| U2 | 1H241521-1Y | NADIS-4921-1, Display circuit pc board ass'y, DX-C111 |
| | 1H242521-2Y | NADIS-4921-2, Display circuit pc board ass'y, DX-C211 |
| | 1H243521-3Y | NADIS-4921-3, Display circuit pc board ass'y, DX-C311 |
| U3 | 1H241522-1Y | NAPS-4922-1, Power supply pc board ass'y <D,N>, DX-C111 |
| | 1H242522-2Y | NAPS-4922-2, Power supply pc board ass'y <D,N>, DX-C211 |
| | 1H243522-3Y | NAPS-4922-3, Power supply pc board ass'y <D,N>, DX-C311 |
| | 1H242522-2AY | NAPS-4922-2A, Power supply pc board ass'y <P>, DX-C211 |
| | 1H243522-3AY | NAPS-4922-3A, Power supply pc board ass'y <P>, DX-C311 |
| | 1H242522-2BY | NAPS-4922-2B, Power supply pc board ass'y <W>, DX-C211 |
| U4 | 1H241523-1Y | NASW-4923-1, Power switch pc board ass'y, DX-C111 |
| | 1H242523-2Y | NASW-4923-2, Power switch pc board ass'y, DX-C211 |
| | 1H243523-3Y | NASW-4923-3, Power switch pc board ass'y, DX-C311 |
| U5 | 1H241552-1Y | NAETC-4952-1, Main circuit pc board ass'y, DX-C111 |
| | 1H242552-2Y | NAETC-4952-2, Main circuit pc board ass'y, DX-C211 |
| | 1H243552-3Y | NAETC-4952-3, Main circuit pc board ass'y, DX-C311 |

## CHANGER MECHANISM PARTS LIST (NCD-56S-C)

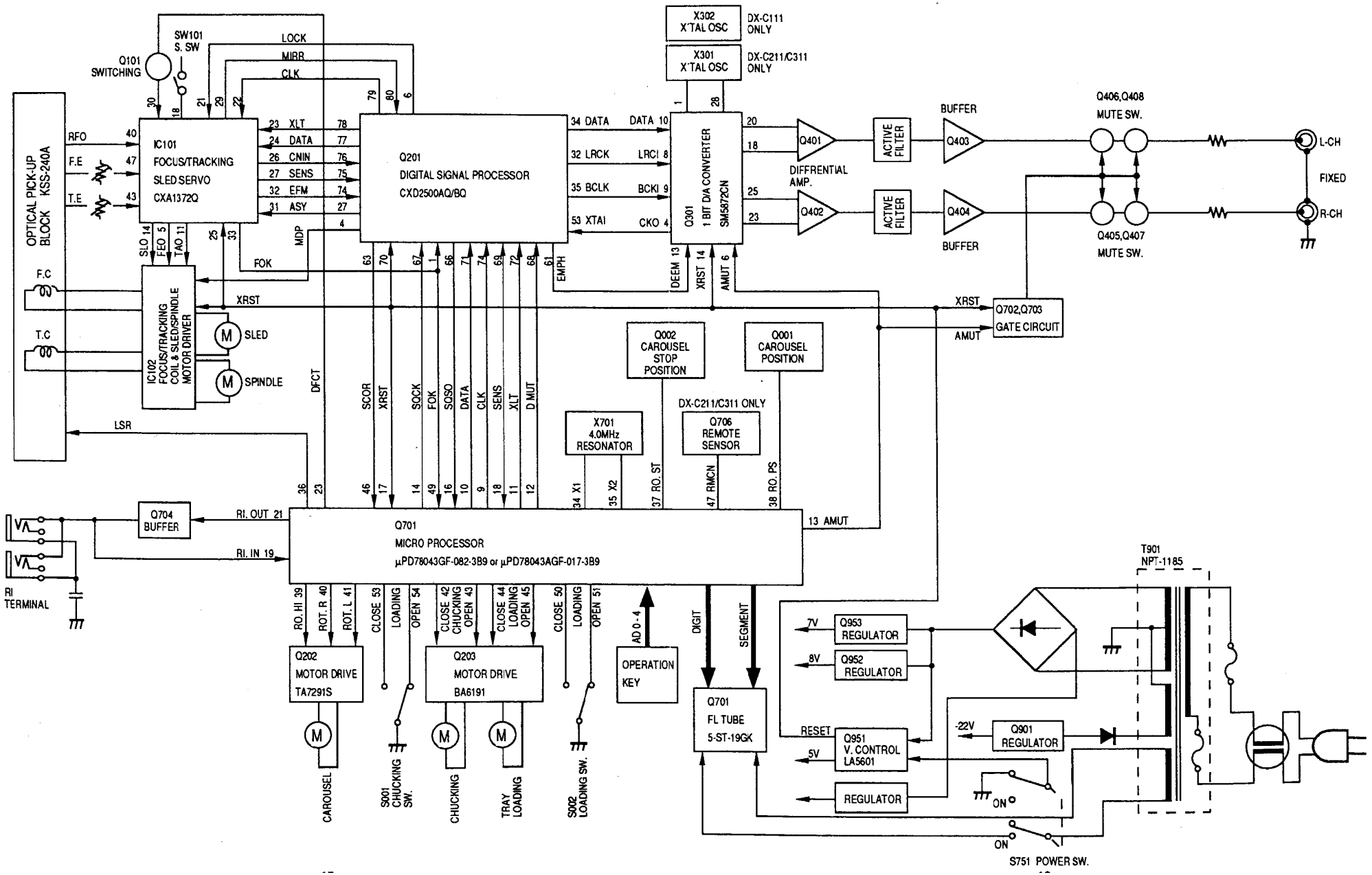
| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| M1 | 24840095AY | RAIL |
| M2 | 24822016BY | BRACKET (GUIDE) |
| M3 | 24836006AY | CUSHION (TRAY) |
| M4 | 24836016Y | CUSHION (LOCK) |
| M5 | 24814001A | ARM |
| M6 | 27301475 | YOKE (CH) |
| M7 | 27301474B | CAP (CH) |
| M8 | 28181019A | MAGNET (CH) |
| M9 | 24836007Y | CUSHION (A2) |
| M10 | 24840096Y | ROULETTE |
| M11 | 24840097Y | TRAY |
| M12 | 24840098Y | ROLLER |
| M18 | 24804015Y | MOTOR |
| M19 | 24810028Y | PULLEY |
| M20 | 24609071AY | SCREW |
| M21 | 24816009Y | RBR BELT (A) |
| M22 | 24816010AY | RBR BELT (B) |
| M23 | 24816011Y | RBR BELT (D) |
| M24 | 24810029Y | GEAR (A) |
| M25 | 24810030Y | GEAR (B) |
| M26 | 24810031Y | GEAR (D) |
| M27 | 24810026Y | CAM GEAR (A) |
| M28 | 24810027Y | CAM GEAR (B) |
| M29 | 24834014Y | WASHER |
| M30 | 24828007Y | SHAFT |
| M31 | 24820025Y | SPRING |
| M32 | 24822017Y | BRACKET (PH) |
| M33 | 24800011BY | CDP M |
| M34 | 24802017AY | CHASSIS AS |
| M35 | 24802015AY | CHASSIS |

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| M36 | 24828008Y | SHAFT (A) |
| M37 | 24828009AY | SHAFT (B) |
| M38 | 24828010Y | SHAFT (C) |
| M39 | 24828011Y | SHAFT (D) |
| M40 | 831430100Y | 3TTW + 10P (BC), SCREW |
| M41 | 833430080Y | 3TTP + 8P (BC)SCREW |
| M42 | 82112606Y | 2.6P + 6FN, SCREW |
| M43 | 8930401SY | RING (E) |
| M44 | 8930201SY | RING (E) |
| M45 | 8930301SY | RING (E) |
| M46 | 1H242542-1Y | ETC-AS |
| M47 | 1H242543-1Y | ETC-AS |
| M48 | 1H242544-1Y | SW-AS |
| M49 | 1H242545-1Y | SW-AS |
| M50 | 2046220822Y | FLAT CABLE |
| M51 | 24609073Y | SCREW |
| M52 | 24834015 | EDGING |
| M53 | 260208Y | WIRE TIE |
| M54 | 24836017Y | CUSHION (OP) |

NOTE: <D>:120V model only
<P>:230V model only
<W>:Worldwide model only
<Q>:240V model only

NOTE: THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

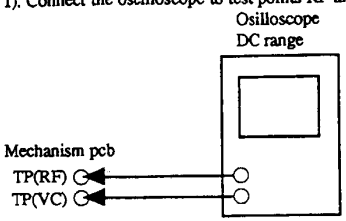
## BLOCK DIAGRAM



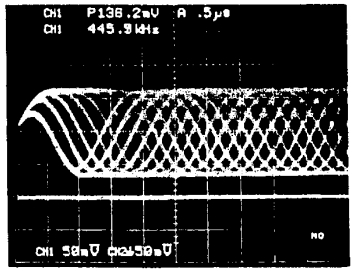
# ADJUSTMENT PROCEDURES

It is not necessary to perform the adjustment of optical pickup.
This confirmation should be made when replacing the optical pickup.

1). Connect the oscilloscope to test points RF and VC.




2). Turn the power switch on.
3). Load the test disc YEDS-18 on the tray and press the play button.
4). Confirm that the waveform on the oscilloscope is optimum eye pattern and optimum level as shown photo 1.
Optimum eye pattern means that shape "◇" can be clearly distinguished at the center of the waveform.




**REFERENCE**

### Focus/Tracking Gain Adjustment

A frequency response analyzer is necessary in order to perform this adjustment exactly.

However, this gain has a margin, so even if it is slightly off, there is no problem. Therefore, do not perform this adjustment.

Focus/tracking gain determines the pick-up follow-up (vertical and horizontal) relative to mechanical noise and mechanical shock when the 2-axis device operate.

However, as these reciprocate, the adjustment is at the point where both are satisfied.

- When gain is raised, the noise when the 2-axis device operates increases.
- When gain is lowered, it is more susceptible to mechanical shock and skipping occurs more easily.
- When gain adjustment is off, the symptoms below appear.

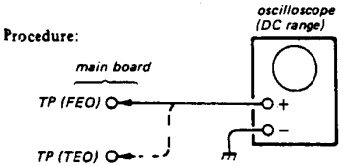
| Symptoms \ Gain | Focus | Tracking |
|---|---|---|
| • The time until music starts becomes longer for STOP →▷PLAY or automatic selection (⏮ ⏭ buttons pressed. (Normally takes about 2 seconds.) | low | low or high |
| • Music does not start and disc continues to rotate for STOP →▷PLAY or automatic selection (⏮ ⏭ buttons pressed.) | – | low |
| • Disc table opens shortly after STOP →▷PLAY. | low or high | – |
| • Sound is interrupted during PLAY. Or time counter display stops progressing. | – | low |
| • More poise during 2-axis device operation. | high | high |

The following is a simple adjustment method.

– Simple Adjustment –

**Note:** Since exact adjustment cannot be performed, remember the positions of the controls before performing the adjustment. If the positions after the simple adjustment are only a little different, return the controls to the original position.

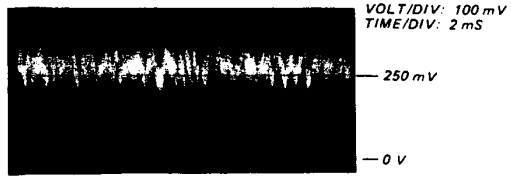
**Procedure:**




1. Keep the set horizontal.
(If the set is not horizontal, this adjustment cannot be performed due to the gravity against the 2 axis device.)
2. Insert disc (YEDS-18) and press ▷PLAY button.
3. Connect oscilloscope to RF/Servo board TP (FE).
4. Adjust RV102 so that the waveform is as shown in the figure below. (focus gain adjustment)

- Incorrent Examples (DC level changes more than on adjusted waveform)

*low focus gain*



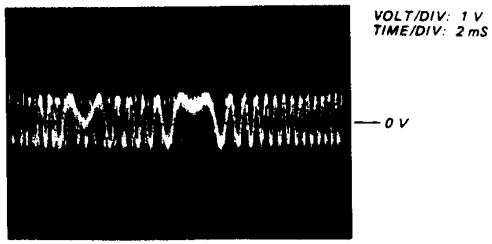

*high focus gain*

5. Connect oscilloscope to RF/Servo board TP (TE).
6. Adjust RV101 so that the waveform is as shown in the figure below. (tracking gain adjustment)

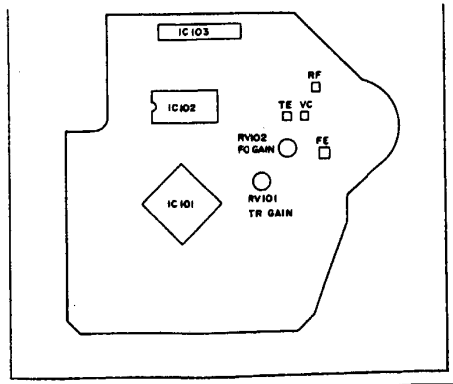
- Incorrect Examples (fundamental wave appears)

*low tracking gain*

*high tracking gain*
*(higher fundamental wave than for low gain)*




**Adjustment Location:** RF/Servo board



# PRINTED CIRCUIT BOARD — PARTS LIST

**Main circuit pc board (NAAR-4920)**

| CIRCUIT NO. | PART NO. | DESCRIPTION |
|---|---|---|
| | ICs | |
| Q201 | 22240487 or | CXD2500AQ or |
| | 22240487A | CXD2500BQ |
| Q202 | 22240239 | TA7291S |
| Q203 | 22240771 | BA6191 |
| Q301 | 22240726 | SM5872CN |
| Q401 | 22240191 | NJM4565D-D |
| Q402 | 22240191 | NJM4565D-D |
| Q403 | 22240191 | NJM4565D-D |
| Q404 | 22240191 | NJM4565D-D |
| Q701 | 22240812 | μPD78043AGF-017-3B9 |
| Q951 | 22240534 | LA5601 |
| | Transistors | |
| Q405-Q408 | 2211706 or | 2SD655-F or |
| | 2211705 | 2SD655-E |
| Q702 | 221281 | DTC114YS |
| Q703, Q704 | 2212600 | DTA124ES |
| Q901 | 2211503 or | 2SA950-O or |
| | 2211504 | 2SA950-Y |
| Q952 | 2211706 or | 2SD655-F or |
| | 2211705 | 2SD655-E |
| Q953 | 2202706 or | 2SD2394-F or |
| | 2202115 | 2SD2061-E |
| Q957 | 2211255 | 2SC1815-GR |
| | Diodes | |
| D201 | 223205 or | 1SS270A or |
| | 223163 | 1SS133 |
| D202 | 224450562 | MTZ5.6B, Zener |
| D701 | 223205 or | 1SS270A or |
| | 223163 | 1SS133 |
| D702 | 224450562 | MTZ5.6B, Zener |
| D703 | 223205 or | 1SS270A or |
| | 223163 | 1SS133 |
| D704 | 224450562 | MTZ5.6B, Zener |
| D906 | 224452204 | MTZ22D, Zener |
| D951 | 224450753 | MTZ7.5C, Zener |
| D952 | 223205 or | 1SS270A or |
| | 223163 | 1SS133 |
| | Crystals | |
| X301 | 3010159 | AT-38-169, Crystal, DX-C211/C311 |
| X302 | 3010230 | CST16.93MXW040, Cera lock, DX-C111 |
| X701 | 3010229 | EFOEC4004A4, Cera lock |
| | Capacitors | |
| C201 | 374721524 | 1500pF±5%, 50V, Plastic |
| C202 | 374724734 | 0.047μF±5%, 50V, Plastic |
| C203 | 354721019 | 100μF, 6.3V, Elect. |
| C205 | 374721034 | 0.01μF±5%, 50V, Plastic |
| C206 | 354781099 | 0.1μF, 50V, Elect. |
| C207-C210 | 354744709 | 47μF,16V, Elect. |
| C303, C305, | 354722219 | 220μF, 6.3V, Elect. |
| C307 | | |
| C308 | 374721044 | 0.01μF±5%, 50V, Plastic |
| C309 | 354722219 | 220μF, 6.3V, Elect. |
| C310, C407, | 374721044 | 0.01μF±5%, 50V, Plastic |
| C408 | | |
| C409, C410, | 374721824 | 1800pF±5%, 50V, Plastic |
| C413, C414 | | |
| C415, C416 | 374724724 | 4700pF±5%, 50V, Plastic |
| C419 | 354781009 | 10μF, 50V, Elect. |
| C420 | 354781009 | 50V, 10μF, Elect. |
| C431-C434 | 354744709 | 47μF, 16V, Elect. |
| C439, C440 | 354744719 | 470μF, 16V, Elect. |
| C701 | 354721019 | 100μF, 6.3V, Elect. |
| C703 | 354762209 | 22μF, 35V, Elect. |
| C707 | 374721024 | 1000pF±5%, 50V, Plastic |
| C708, C709 | 374722734 | 0.027μF±5%, 50V, Plastic |
| C714 | 354780109 | 1μF, 50V, Elect. |
| C903, C904 | 354764709 | 47μF, 35V, Elect. |
| C924, C925 | 374721044 | 0.01μF±5%, 50V, Plastic |
| C953 | 354742219 | 220μF, 16V, Elect. |
| C954 | 374721044 | 0.01μF±5%, 50V, Plastic |
| | 374722244 | 0.22μF±5%, 50V, Plastic |
| C955 | 354724719 | 470μF, 6.3V, Elect. |
| C956 | 374721044 | 0.01μF±5%, 50V, Plastic |
| | 374722244 | 0.22μF±5%, 50V, Plastic |
| C957 | 354780109 | 1μF, 50V, Elect. |
| C958 | 354721029 | 1000μF, 6.3V, Elect. |
| C960 | 374721044 | 0.01μF±5%, 50V, Plastic |
| C961 | 374722734 | 0.027μF±5%, 50V, Plastic |
| C962 | 354722219 | 220μF, 6.3V, Elect. |
| C963, C964 | 354744709 | 47μF, 16V, Elect. |
| C966 | 354781009 | 10μF, 50V, Elect. |
| C967 | 354742219 | 220μF, 16V, Elect. |
| | Resistors | |
| R903 | 452530184F | 1.8ohms, 1/2W, Metal oxide |
| | Sockets | |
| P101A | 25050895 | NSCT-31P690, Socket |
| P702A | 25051227 | NSCT-34P1017, Socket |
| | Terminals | |
| P401 | 25045408 | NPJ-2PDBL233, Line out |
| P701 | 25045330 | NPJ-2PDBL184, RI |

**Display circuit pc board (NADIS-4921)**

| CIRCUIT NO. | PART NO. | DESCRIPTION |
|---|---|---|
| Q705 | 212132 | 5-ST-19GK, FL TUBE |
| Q706 | 24130010 | HC-312, Remote sensor, DX-C211/C311 |
| | Diode | |
| D707 | 224450512 | MTZ5.1B, Zener |
| | Capacitor | |
| C710 | 355721019 | 100µF, 6.3V, Elect., DX-C211/C311 |
| | Switches, Terminals, Sockets | |
| S701,S702 | 25035652 | NPS-111-S604, Push SW., DX-C311 |
| S703-S705 | 25035652 | NPS-111-S604, Push SW. |
| S706,S707 | 25035652 | NPS-111-S604, Push SW., DX-C311 |
| S708-S710 | 25035652 | NPS-111-S604, Push SW. |
| S711,S712 | 25035652 | NPS-111-S604, Push SW., DX-C311 |
| S713-S715 | 25035652 | NPS-111-S604, Push SW. |
| S716,S717 | 25035652 | NPS-111-S604, Push SW., DX-C311 |
| S718-S720 | 25035652 | NPS-111-S604, Push SW. |
| S721-S723 | 25035652 | NPS-111-S604, Push SW., DX-C311 |
| S724-S725 | 25035652 | NPS-111-S604, Push SW. |
| S726,S728 | 25035652 | NPS-111-S604, Push SW., DX-C311 |
| S729, S730, S734, S735, S739, S740 | 25035652 | NPS-111-S604, Push SW. |
| | Socket | |
| P703A | 25051227 | NSCT-34P1017, Socket |

**Power supply pc board (NAPS-4922)**

| CIRCUIT NO. | PART NO. | DESCRIPTION |
|---|---|---|
| | Diode | |
| D901-D905 | 22380032 | 1SR139-100 |
| | Coil | |
| L901 | 231222 | NCH-3454 |
| | Capacitors | |
| C902 | 354784709 | 47µF, 50V, Elect. |
| C906 | 393142227 | 2200µF, 16V, Elect., DX-C111/C211 |
| | 393344727 | 4700µF, 16V, Elect., DX-C311 |
| C907 | 393142227 | 2200µF, 16V, Elect. |
| C909 | 3500077 | DE7150F, 472M, IS |
| C922 | 374722734 | 0.027µF, 50V, Plastic, DX-C311 |
| | Plug | |
| ⚠ P901A | 25055676 | NPLG-2P632, FOR AC CORD |
| | Others | |
| | 25050065Y | YSH403T, Fuse holder, <P,W>, DX-C211/C311 |
| ⚠ S901 | 25065437Y | NSS-22157P, Slide SW., <W>, DX-C211/C311 |

**Power switch pc board (NASW-4923)**

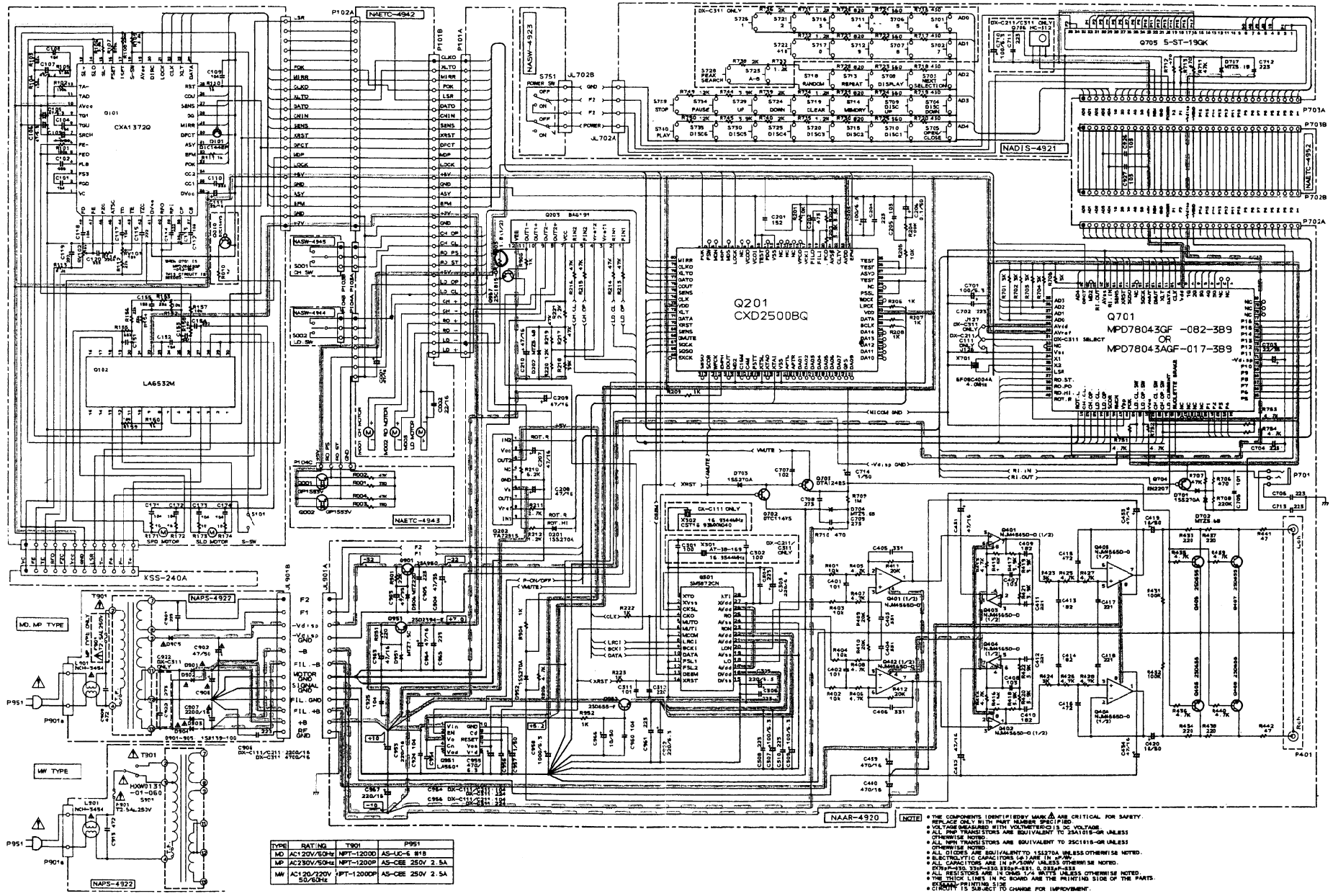
| CIRCUIT NO. | PART NO. | DESCRIPTION |
|---|---|---|
| ⚠ S751 | 25035481 | NPS-122-L443, Push SW. |

**RF/SERVO pc board**

| CIRCUIT NO. | PART NO. | DESCRIPTION |
|---|---|---|
| IC101 | 22240394 | CXA1372Q, IC |
| IC102 | 22240551 | LA6532M, IC |
| Q101 | 2214290 | DTC144EF, Transistor |
| S101 | 25065446 | NLF/11022, Leaf SW. |

NOTE: THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

# SCHEMATIC DIAGRAM


NAETC-4942
NADIS-4921
NAETC-4952
NASW-4923
NASW-4945
NASW-4944
NAETC-4943
NAPS-4922
NAAR-4920
KSS-240A
Q201
CXD2500BQ
Q701
MPD78043GF -082-3B9
OR
MPD78043AGF-017-3B9
LA6532M
CXA1372Q
Q705 5-ST-19GK
MD, MP TYPE
MW TYPE
NOTE
• THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR SAFETY.
REPLACE ONLY WITH PART NUMBER SPECIFIED.
• VOLTAGE MEASURED WITH VOLTMETER(DC) IS DC VOLTAGE.
• ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
• ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
• ALL DIODES ARE EQUIVALENT TO 1SS270A UNLESS OTHERWISE NOTED.
• ELECTROLYTIC CAPACITORS ⊕ ARE IN μF/50WV UNLESS OTHERWISE NOTED.
• ALL CAPACITORS ARE IN μF/50WV UNLESS OTHERWISE NOTED.
EX) 1=1μ, 33=33μ, 330=330μF, R33=0.033μF, 1=1Ω
• ALL RESISTORS ARE IN OHMS 1/4 WATTS UNLESS OTHERWISE NOTED.
• THE THICK LINES IN PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
EXCEPT PRINTING SIDE
• CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.
TYPE | RATING | T901 | P951
MD | AC120V/60Hz | NPT-12000 | AS-UC-6 #18
MP | AC230V/50Hz | NPT-1200P | AS-CEE 250V 2.5A
MW | AC120/220V 50/60Hz | NPT-1200DP | AS-CEE 250V 2.5A

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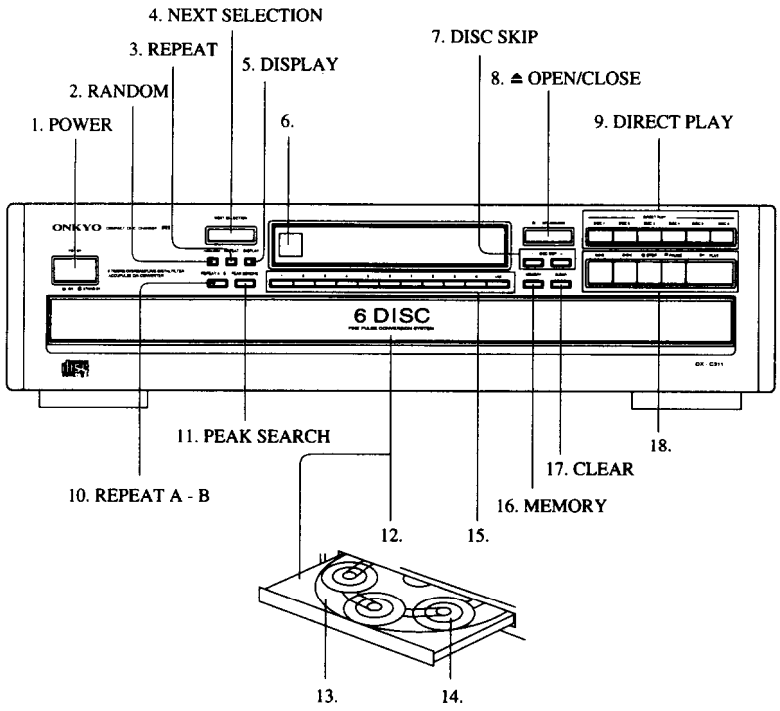
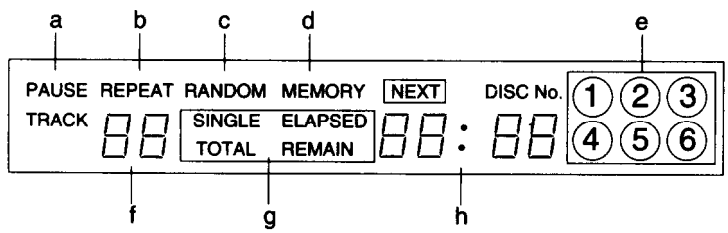
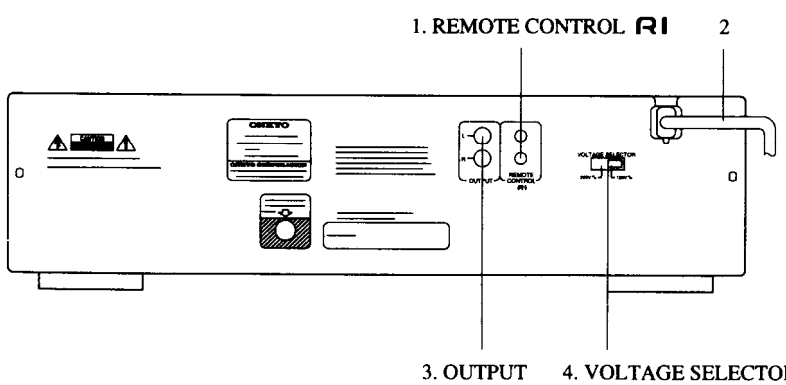
# CONTROL POSITIONS AND NAMES

**NOTE:**
If there is a protective film on the display, which is making it difficult to read the display, remove it.




## Front panel

1. POWER button
2. RANDOM button
3. REPEAT button
4. NEXT SELECTION button
5. DISPLAY button
6. Remote Control Sensor (DX-C311/C211 only)
7. DISC SKIP buttons
8. ≜ OPEN/CLOSE button
9. DIRECT PLAY buttons
10. REPEAT A-B button (DX-C311 only)
11. PEAK SEARCH button (DX-C311 only)
12. Loading drawer
13. Disc tray(s) (1 - 6)
14. Carousel
15. Number buttons (1 - 9, 0) and Plus Ten button (+10) (DX-C311 only)
16. MEMORY button
17. CLEAR button
18. Operation buttons
    - ⏮ :Down button
    - ⏭ :Up button
    - ⏸ PAUSE :Pause button
    - ■ STOP :Stop button
    - ▶ PLAY :Play button

## Display

a. PAUSE indicator
b. REPEAT indicator
c. RANDOM indicator
d. MEMORY indicator
e. Disc number indicator
f. TRACK number display
g. ELAPSED/REMAIN indicator
h. Time display

## Rear panel

1. REMOTE CONTROL jacks
2. Power Supply Cord
3. Analog OUTPUT jacks
4. VOLTAGE SELECTOR (Worldwide models only)

**ONKYO CORPORATION**

Sales Planning & Promotion Dept. : 2-1, Nisshin-cho, Neyagawa-shi, OSAKA 572, JAPAN
Tel: 0720-31-8111 Fax: 0720-33-5222
**ONKYO U.S.A CORPORATION**
200 Williams Drive. Ramsey. N.J. 07446, U.S.A.
Tel: 201-825-7950 Fax: 201-825-8150
**ONKYO DEUTSCHLAND GMBH ELECTRONICS**
Industriestrasse 18-20, 82110 Germering, GERMANY
Tel: 089 84 93 20 Fax: 089 84 93 226
**ONKYO FRANCE**
Immeuble Le Diamant, Domaine Technologique de Saclay, 4 Rue René Razel,
91892 SACLAY, FRANCE Tel: (1) 69 33 14 00 Fax: (1) 69 41 35 84

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